

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Currently Amended): An aspiration catheter for removing by aspiration a substance from a living body comprising:

a main shaft including a distal shaft and a proximal shaft, wherein an aspiration lumen for removing the substance by aspiration is disposed in the distal shaft and the proximal shaft;

a guidewire shaft disposed at the distal region of the distal shaft, the guidewire shaft having a guidewire lumen into which a guidewire is insertable, the guidewire lumen being disposed in the guidewire shaft;

a hub provided at the proximal end of the proximal shaft, the aspiration lumen extending to the hub; and

a detachable core wire disposed in the aspiration lumen,

wherein the relationship  $0.4 \leq R1/R2 \leq 0.7$  is satisfied, wherein R1 is a maximum outer diameter of the core wire, and R2 is a minimum inner diameter of the aspiration lumen located on the distal side of the hub, and

wherein the distal end of the core wire recedes from the distal end of the aspiration lumen in the proximal direction.

Claim 2 (Original): The aspiration catheter according to claim 1, wherein a connector is fixed on the proximal end of the core wire, and the connector is mounted to the proximal end of the hub in a detachable manner.

Claim 3 (Original): The aspiration catheter according to claim 2, wherein the interior of the aspiration lumen can be flushed through the connector with the connector being mounted to the proximal end of the hub in a detachable manner.

Claim 4 (Cancel)

Claim 5 (Canceled)

Claim 6 (Canceled)

Claim 7 (Previously Presented): The aspiration catheter according to claim 1, wherein the core wire is a spring wire comprising a coiled metal wire.

Claim 8 (Previously Presented): The aspiration catheter according to claim 1, wherein at least a portion of the core wire has a tapered shape in which the outer diameter becomes larger toward the proximal end.

Claim 9 (Previously Presented): The aspiration catheter according to claim 1, wherein at least a portion of the core wire has flexibility which becomes higher toward the distal end.

Claim 10 (Previously Presented): The aspiration catheter according to claim 1, wherein the core wire comprises stainless steel, a Co--Cr alloy, an Ni--Ti alloy, an Ni--Ti--Fe alloy, an Ni--Ti--Cu alloy, an Ni--Ti--Cr alloy, an Ni--Ti--V alloy, an Ni--Ti--Co alloy, an Ni--Ti--Nb alloy, an Ni--Ti--Pd alloy, an Ni--Ti--Cu--Cr alloy, or a composite thereof.

Claim 11 (Previously Presented): The aspiration catheter according to claim 1, wherein the tip of the distal shaft is obliquely cut, the distal end of the guidewire shaft is positioned at the obliquely cut distal end of the distal shaft or protrudes from the distal end of the distal shaft in the distal direction, and the relationship  $0.5 \leq L2/L1$  is satisfied, wherein L1 is the length of the obliquely cut portion of the distal shaft in the longitudinal direction of the catheter, and L2 is the length from the proximal end of the guidewire shaft to the distal end of the distal shaft.

Claim 12 (Original): The aspiration catheter according to claim 11, wherein the relationship  $2 \text{ mm} \leq L1 \leq 10 \text{ mm}$  is satisfied.

Claim 13 (Previously Presented): The aspiration catheter according to claim 1, wherein the guidewire shaft is provided with a radiopaque marker.

Claim 14 (Previously Presented): The aspiration catheter according to claim 1, wherein the proximal shaft comprises a polyimide.

Claim 15 (Previously Presented): The aspiration catheter according to claim 1, wherein the proximal shaft comprises a braided tube in which a metal braid and a polymer material are combined.

Claim 16 (Original): The aspiration catheter according to claim 15, wherein the braided tube comprises an inner layer defining the aspiration lumen, a metal braid disposed on the outer surface of the inner layer, and an outer layer disposed on the outer surface of the metal braid.

Claim 17 (Previously Presented): The aspiration catheter according to claim 1, wherein at least a proximal portion of the proximal shaft has a flexural modulus of 1 GPa or more.

Claim 18 (Previously Presented): The aspiration catheter according to claim 1, wherein at least a portion of the distal shaft is applied with a hydrophilic coating that exhibits a lubricating property in a wet environment.

Claim 19 (Previously Presented): A method for using the aspiration catheter according to claim 1, the method comprising the steps of inserting the aspiration catheter into a living body with

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the core wire being present in the aspiration lumen, then withdrawing the core wire, and applying a negative pressure to the aspiration lumen to remove by aspiration a substance from the living body.

Claim 20 (Previously Presented): The aspiration catheter according to Claim 1, wherein the core wire is the one with a straight shape.